(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: METHOD AND UNIT FOR SUBSTRACTING QUANTIZATION NOISE FROM A PCM SIGNAL

$$B_q = \sqrt{\sum_{n=0}^{W-1} \frac{\{(s^*_{min}[n] - s^*_{max}[n]) \cdot w[n]\}^2}{12}} \qquad (I)$$

(57) **Abstract:** The invention relates to method and unit for substracting quanti zation noise from a pulse code modulated PCM signal being segmented into frames. For achieving this it is proposed to first calculate for each frame of said PCM signal a quantization noise level Bq according to the following equation (I) wherein n indicates a specific sample of the PCM signal, $S^*_{min}[n]$ represents the minim um quantization noise level for a specific sample value $s^*[n]$ of said PCM signal, $S^*_{max}[n]$ represents the maximum quantization noise level for the specific sample value $s^*[n]$ of the PCM signal, w[n] represents a window-function and W represents the number of samples per window. Subsequently, the quantization noise as represented by said quantization noise level Bq has to be substracted from said PCM signal, preferably with the help of a suitable background noise substracting system.

WO 03/063160 A1